

REMARKS

Claims 51-101 are pending in the Office Action, with claim 91 being cancelled with this Response, and claims 52 and 83-84 having been previously cancelled. Applicant thanks the Examiner for indicating the allowable subject matter of claims 72 and 90-91. Claims 51 and 55, have been amended. The Examiner's rejections will now be respectfully addressed in turn.

Rejections under 35 U.S.C. §102(b)

Claims 51, 53-61, 63-71, 73-82, 86-89, and 92-101 have been rejected under 35 U.S.C. §102(b) as being anticipated by United States Patent No. 1,927,286 to Jaeger ("Jaeger" hereinafter). Applicant respectfully traverses this rejection.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Applicant's claim 51 recites *inter alia*,

"a cross-sectional area of said main reaction passage section that is between 0.5 and 100 times a cross-sectional area of said main heat transfer passage section and the inlet or outlet passage sections of the at least three sections are between 0.5 and 100 times the cross-sectional area of said main heat transfer passage section," and

Applicant's claim 55 recites *inter alia*,

"wherein at least one of a cross-sectional area of said main reaction passage section is between 0.5 and 100 times a cross-sectional area of said main heat transfer passage

section and the inlet or outlet passage sections of the at least three sections are between 0.5 and 100 times the cross-sectional area of said main heat transfer passage section.”

Applicant respectfully points out that the above amendments have been taken from the allowable subject matter of now cancelled claim 91. As the elements of these amendments have been deemed to be allowable, Applicant respectfully submits that Jaeger does not teach these elements. For at least this reason, Jaeger fails to disclose all of the limitations of claims 51 and 55. Accordingly, Jaeger does not anticipate claims 51 or 55. Applicant respectfully submits that claims 51 and 55 are not further rejected or objected and is therefore allowable. Claims 53-54, 56-61, 63-71, 73-82, 86-89, and 92-101 variously depend from claims 51 and 55, are not further rejected or objected, and are correspondingly allowable. Reconsideration and allowance of claim 51, 53-61, 63-71, 73-82, 86-89, and 92-101 is respectfully requested.

Applicant also notes that the relationships in cross-sectional area between the different passage sections define a working region for the catalytic device, wherein a pressure loss/drop may be made substantially equal in the mentioned passage sections over the same distance (e.g. pressure loss (ΔP_b) in the narrow pipes of the main heat transfer passage section and pressure loss (ΔP_a) in the much wider but pellet filled main reaction passage, and wherein a temperature transfer curve may be made substantially linear from one passage section to the next (e.g. linearly via the pipe wall of the main heat transfer passage section to the main reaction passage section). Hereby a catalytic device that allows the use of material in the device structure to be minimized (e.g. in the passage section walls), while also allowing the size and weight of the device is minimized. This further allows the cleaning efficiency of the device is optimized in relation to the cost of the device.

Rejections under 35 U.S.C. §103(a)

Claim 62 has been rejected under 35 U.S.C. §103(a) as being obvious Jaeger in view of design choice. Applicant respectfully traverses this rejection.

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art and that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996).

Claim 62 depends from claim 55. As, Jaeger does not teach every element of Applicant's claim 55 (see the 102 Remarks above), Jaeger does not teach every element of Applicant's claim 62. Accordingly, Applicant respectfully submits that *prima facie* obviousness does not exist regarding amended Claim 62 with respect to Jaeger. Since Jaeger fails to teach or suggest all of the limitations of amended Claim 62, clearly, one of ordinary skill at the time of Applicant's invention would not have a motivation to modify the reference, or a reasonable likelihood of success in forming the claimed invention by modifying. Thus, here again, *prima facie* obviousness does not exist. *Id.*

Conclusion

Applicant believes that all of the outstanding objections and rejections have been addressed herein and are now overcome. Entry and consideration hereof and issuance of a Notice of Allowance are respectfully requested.

Applicant hereby petitions for any extension of time under 37 C.F.R. 1.136(a) or 1.136(b) that may be necessary for entry and consideration of the present Reply.

If there are any charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130 maintained by Applicants' attorneys.

The Office is invited to contact applicant's attorneys at the below-listed telephone number concerning this Amendment or otherwise regarding the present application.

Respectfully submitted,

By: 

Daniel R. Gibson
Registration No. 56,539
CANTOR COLBURN LLP
55 Griffin Road South
Bloomfield, CT 06002
Telephone: 860-286-2929
Facsimile: 860-286-0115
Customer No. 23413

Date: October 29, 2007